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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,932	07/15/2003	Rebecca L. Engel	P0011481.00	6826
77218	7590	04/28/2010		
Medtronic CardioVascular Mounds View Facility South 8200 Coral Sea Street N.E. Mounds View, MN 55112			EXAMINER MEDWAY, SCOTT J	
			ART UNIT	PAPER NUMBER
			3763	
			NOTIFICATION DATE	DELIVERY MODE
			04/28/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

rs.vasciplegal@medtronic.com

Office Action Summary

Application No.

10/619,932

Applicant(s)

ENGEL ET AL.

Examiner

SCOTT MEDWAY

Art Unit

3763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 7, 8, 10 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 7, 8, 10 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB06)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 03/29/2010

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/29/2010 has been entered.
2. Claims 6 and 12 have been cancelled. Claims 1 and 13 have been amended. No claims are newly added.
- 3.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. **Claims 1, 3, 7, 8, 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ash et al (U.S. Pat. 5,947,953, hereinafter "Ash") in view of de la Rama et al (U.S. Pat. 6,246,914 B1, hereinafter "de la Rama").**

Regarding claims 1, 3, 6 and 10, Ash discloses a venous cannula comprising a body portion (48) wherein at least the body portion is valveless, wherein the body has a wall and a lumen and is sized for placement in a portion of a venous system, further comprising a plurality of valveless apertures (74) interconnected with the lumen and permitting fluid flow from outside the lumen into the lumen. It is noted that Ash does not

disclose the claimed aperture shape. De la Rama discloses a catheter comprising a plurality of apertures (12) taking on an eye shape (see Fig. 3) in which the apertures have first and second corners (14A, 14B) defined by arcuate portions that intersect with each other, wherein each of the apertures has a longer major axis perpendicular with the longitudinal axis of the lumen, and a shorter minor axis. The apertures are arranged into a plurality of rows extending along the longitudinal axis of the lumen and the corners do not buckle outwardly as the cannula is flexed (see Fig. 3). Since Ash contemplates a plurality of aperture shapes and since de la Rama clearly discloses the suitability of apertures shaped in an eye-like fashion to ensure that fluid may still flow through the apertures even when the catheter on which the apertures are formed buckles, it would have been obvious for one of ordinary skill in the art at the time of the invention to seek the aperture shape of de la Rama for use in the cannula of Ash because that combination would yield the claimed invention with a reasonable expectation of success.

Regarding claims 7 and 13, Ash discloses that the apertures are arranged in a plurality of adjacent and offset rows such that the apertures in the adjacent rows are a different distance from the distal tip of the body (see Fig. 3 wherein the apertures are shown to be arranged in offset rows) wherein doing so is suitable to allow fluid to flow into some apertures even if other apertures become blocked.

6.

Response to Arguments

7. Applicant's arguments filed 03/29/2010 have been fully considered but they are not persuasive.
8. Responding to Applicant's argument that Examiner consider Applicant's specification to glean Applicant's intended definition of the word "outwardly", Applicant is reminded that Examiner is not permitted to read limitations of the specification into a claim to thereby narrow the scope of the claim. Examiner suggests Applicant more clearly define what is meant by "outwardly", for example, the outward direction is facing away and is external from the claimed lumen. Examiner reasonably broadly defines "outward" as being "directed away from a center" in accordance with its dictionary definition. Further, Applicant is reminded that the language "the corners do not buckle outwardly as the cannula is flexed" (claim 8) recites a functional limitation. While features of an apparatus *may* be recited either structurally or functionally without being considered improper, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function {In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997)}. See MPEP 2114.

Responding to Applicant's argument that de la Rama does not disclose Applicant's claimed slits, Examiner asserts that the shape of the slits shown in Fig. 3 of de la Rama are *nearly identical* to the slits in Figs. 4 and 5 of the instant application. Clearly, the slits shown in Fig. 3 of de la Rama have first and second corners defined by arcuate portions. Further, Applicant argues that Ash and de la Rama fail to disclose a "venous cannula", however, as defined by Examiner, a cannula is a tube suitable for

insertion into the body. De la Rama expressly discloses a "transvenous" cannula and several portions of the disclosure of Ash describe a tube suitable for venous use. Even so, Examiner asserts that the recitation of a "venous cannula" merely imparts the structural limitation of a tube which is capable of being inserted into a vein.

Examiner asserts that nothing in the references of Ash or de la Rama or within the knowledge of those of ordinary skill in the art would suggest that forming apertures to be eye-shaped would render the reference of Ash unsuitable for its intended purpose of facilitating fluid intake. Examiner asserts that since de la Rama specifically discloses that the venous cannula is made from a flexible material suitable to transfer fluid easily even while traveling through curved veins, that there would be no reason to expect that the cannula would buckle when traveling through a curved vein (which would preclude the device from performing as intended). Further, since Applicant does not recite any degree of flexure in the device, Examiner asserts that the device of de la Rama could be capable of flexing, even if a very small amount, without the corners of the apertures buckling. Further, de la Rama discloses that the corners of the apertures could be shaped so as to be suitable for "stress release" when being flexed, which is interpreted as relieving buckling.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SCOTT MEDWAY whose telephone number is (571) 270-3656. The examiner can normally be reached on Monday through Friday, 7:30 AM

to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nicholas Lucchesi can be reached on (571) 272-4977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Scott J. Medway/
Examiner, AU 3763
04/20/2010

/Nicholas D Lucchesi/
Supervisory Patent Examiner, Art Unit 3763